

Abstract of the Disclosure

Loudspeakers can be damaged by high drive signals. One reason for this damage is an excess vibration displacement of the coil-diaphragm assembly. This invention describes a novel method for limiting this displacement by a signal processor. In the present invention, a low frequency shelving and notch filter is used to attenuate low frequencies according to a prediction of the loudspeaker displacement. A novel method for calculating coefficient values for a digital implementation of the low frequency shelving and notch filter according to the predicted displacement is described.

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